

Amendments to the Claims:

Claims 1-21. (Cancelled)

22. (Currently amended) A wheat plant ~~comprising the herbicide resistance characteristics of the plant with American Type Culture Collection (ATCC) Patent Deposit Designation Number PTA-4257, wherein the wheat plant is selected from the group consisting of:~~

- (a) a wheat plant having ATCC American Type Culture Collection (ATCC) Patent Deposit Designation Number PTA-4257;
- (b) a wheat plant that is a recombinant or genetically engineered derivative of the plant with ATCC Patent Deposit Designation Number PTA-4257, wherein said wheat plant comprises a polynucleotide as defined in SEQ ID NO:3;
- (c) a wheat plant that is any progeny of the plant with ATCC Patent Deposit Designation Number PTA-4257, wherein said wheat plant comprises a polynucleotide as defined in SEQ ID NO:3;
- (d) a wheat plant comprising a polynucleotide as defined in SEQ ID NO:3;
- (e) ~~a wheat plant comprising a polynucleotide encoding a polypeptide as defined in SEQ ID NO:4;~~
- (f) ~~a wheat plant comprising a polypeptide as defined in SEQ ID NO:4; and~~
- (g) ~~a wheat plant that is a progeny descendant of any of the plants of (a) through (f). (e), wherein said wheat plant comprises a polynucleotide as defined in SEQ ID NO:3.~~

23. (Currently amended) The wheat plant of claim-22, 70, wherein the imidazolinone herbicide is selected from the group consisting of 2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)-nicotinic acid, 2-(4-isopropyl)-4-methyl-5-oxo-2-imidazolin-2-yl)-3-quinolinecarboxylic acid, 5-ethyl-2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)-nicotinic acid, 2-(4-isopropyl-4-

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methyl-5-oxo-2-imidazolin-2-yl)-5-(methoxymethyl)-nicotinic acid, 2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)-5-methylnicotinic acid, and a mixture of methyl 6-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)-m-toluate and methyl 2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)-p-toluate.

24. (Currently amended) The wheat plant of claim 22, 70, wherein the imidazolinone herbicide is 5-ethyl-2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)-nicotinic acid.

25. (Currently amended) The wheat plant of claim 22, 70, wherein the imidazolinone herbicide is 2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)-5-(methoxymethyl)-nicotinic acid.

26. (Currently amended) A plant part of the wheat plant of claim 22[[.]], wherein the plant part comprises a polynucleotide as defined in SEQ ID NO:3.

27. (Currently amended) A plant cell of the wheat plant of claim 22[[.]], wherein the plant cell comprises a polynucleotide as defined in SEQ ID NO:3.

Claims 28-57. (Cancelled)

58. (Currently amended) A seed produced by the wheat plant of claim 22, wherein the seed comprises ~~the herbicide resistance characteristics of the plant with ATCC Patent Deposit Designation Number PTA-4257.~~ a polynucleotide as defined in SEQ ID NO:3.

Claims 59-61. (Cancelled)

62. (Previously presented) The wheat plant of claim 22, the plant further comprises a *Triticum aestivum* IMI nucleic acid selected from the group consisting of an Imi1 nucleic acid and an Imi2 nucleic acid.

63. (Previously presented) The wheat plant of claim 62, wherein the *Triticum aestivum* IMI nucleic acid encodes an IMI polypeptide comprising a mutation in a conserved amino acid sequence selected from the group consisting of a Domain A, a Domain B, a Domain C, a Domain D and a Domain E.

64. (Previously presented) The wheat plant of claim 63, wherein the conserved amino acid sequence is a Domain E.

65. (Previously presented) The wheat plant of claim 64, wherein the mutation results in a serine to asparagine substitution as compared to a wild-type AHAS protein.

66. (Previously presented) The wheat plant of claim 22, said plant comprising two *Triticum aestivum* IMI nucleic acids.

67. (Previously presented) The wheat plant of claim 22, comprising an Imi1 nucleic acid and an Imi3 nucleic acid.

68. (Previously presented) The wheat plant of claim 22, said plant comprising three *Triticum aestivum* IMI nucleic acids.

69. (Previously presented) The wheat plant of claim 22, wherein the plant is not transgenic.

70. (New) The wheat plant of claim 22, wherein the plant comprises increased tolerance to an imidazolinone herbicide as compared to a wild-type variety of the plant.

71. (New) A seed of wheat line Krichauff IMI K-42, representative seed of said line having been deposited under ATCC Patent Deposit Designation Number PTA-4257.

72. (New) A wheat plant, or a part thereof, produced by growing a seed of wheat line Krichauff IMI K-42, representative seed of said line having been deposited under ATCC Patent Deposit Designation Number PTA-4257.

73. (New) A method for producing a hybrid wheat seed wherein the method comprises crossing a first wheat plant with a different wheat plant and harvesting the resulting hybrid wheat seed, wherein the first wheat plant is produced by growing a seed of wheat line Krichauff IMI K-42, representative seed of said line having been deposited under ATCC Patent Deposit Designation Number PTA-4257.

74. (New) A hybrid wheat seed produced by a method comprising crossing a first wheat plant with a different wheat plant and harvesting the resulting hybrid wheat seed, wherein the first wheat plant is produced by growing a seed of wheat line Krichauff IMI K-42, representative seed of said line having been deposited under ATCC Patent Deposit Designation Number PTA-4257.

75. (New) A wheat plant, or a part thereof, produced by growing a hybrid lentil seed produced by a method comprising crossing a first wheat plant with a different wheat plant and harvesting the resulting hybrid wheat seed, wherein the first wheat plant is produced by growing a seed of wheat line Krichauff IMI K-42, representative seed of said line having been deposited under ATCC Patent Deposit Designation Number PTA-4257.